wrinkles around eyes and mouth and the hands were harsh and wrinkled, all of which the doctor attributed to the condition of the womb. In a footnote he says that as the uterine functions gradually improved after curettement, the chloasma and wrinkles disappeared, to reappear four months later with a return of the menorrhagia.

Under tropho-neuroses, caused by disorder of the sympathetic nervous system, were classed Raynaud's disease, acroparæsthesia, giant urticaria, fugitive erythema and hyperidrosis. The vaso-motor cases have in common, paroxysmal appearances of the symptoms, symmetry of distribution, initial pallor followed by congestion, tendency of exposed parts to be affected and preponderance of women in the victims. PATRICK.

270. THE LUMLEIAN LECTURES ON SOME PROBLEMS IN CONNECTION WITH APHASIA AND OTHER SPEECH DEFECTS. Lancet (April 3d, 10th and 24th and May 1st, 1897). Also ON A CASE OF AMNESIA OF 18 YEARS' DURATION WITH AUTOPSY. H. Charlton Bastian (Vol. 80 of the Medico-Chirurgical Transactions).

In his "Lumleian Lectures," the author begins with a consideration of the method of the storing up of word memories, and their reproduction as speech. There are three kinds of verbal memory. 1. "Auditory memory; the memory of the sound of words." 2. "Visual memory; the memory of the visual appearances (printed or written) of words." 3. "Kinæsthetic memory;" the latter being subdivided into "glosso-kinæsthetic" memories, i. e., "the memories of the different groups of sensory impressions, resulting from mere movements of the vocal organs during the utterance of words," and "cheiro-kinæsthetic" memories; i. e., "the memories of the different groups of sensory impressions, emanating from muscles, joints, and skin, during the act of writing individual letters and words." Since the centres for these different kinds of memories are not only in relation, each to its own afferent fibres, but are also closely connected with each other by commissural or associational fibres, the memory or recollection of a word in one, probably involves some simultaneous activity in one or more of the other centres. The centre for visual word memories is located in the angular gyrus and perhaps partly in the supramarginal lobule; that for auditory word memories in the posterior half or two-thirds of the upper temporal convolution. The author has previously stated his opinion that the motor centres of Ferrier and others "are really sensory centres of kinæsthetic type, by means of which movements are guided." The "glosso-kinæsthetic" centre is located in Broca's region. The "cheiro-kinæsthetic" centre cannot be so positively determined, but the author is inclined to follow Eauld, and to place it in the posterior part of the second frontal gyrus.

He suggests that the auditory and visual word centres are joined by a double set of commissural fibres, and that there is a particularly close connection between the auditory and "glosso-kinæsthetic" centres on the one hand, and between the visual and "cheiro-kinæsthetic" centres on the other. In the study of speech defects then, there are to be considered lesions, a, in the word centres themselves; b, in the different commissures by means of which these centres are connected; c, in the fibres connecting the two kinæsthetic word centres with their related motor centres in the bulb and cervical region of the cord; d, in these motor centres themselves. "Words are the symbols with which our thoughts are inextricably interwoven." Their revived "images" "may enter into thought processes by more or less simultaneous renewal of activity in different regions of the cerebral cortex." The revival may be as the sound of spoken words, as the visual impressions of written or printed words, or as "the feelings of the muscular contractions concerned in the pronuniciation of words." The two former are the more distinct and easily reproduced, the latter very vague.

There are two distinct and opposed views as to the method of word recall in ordinary thought. According to the first, words are revived "as faint excitations of the processes occurring in motor centres during the articulation of words." The second view is that words are revived mainly "as auditory ideas or images." This latter view the author strongly advocates, and gives his reasons for so doing very fully. Word recall may take place and doubtless does take place also as the revival of a visual memory, and in some persons the ability to recall words through the memory of their appearance when written or printed is very marked. In the great majority of people, however, the memory of the sound of spoken words seems that most easily revived. On this basis individuals may be classified as "visuals" and "auditives," according as the one faculty or the other predominates. "In ordinary persons, the four memories of words seem to be called into play in definite couples"—"the auditory and glosso-kinæsthetic revivals taking place during articulate speech, and the visual and cheiro-kinæsthetic revivals taking place during ordinary writing." The functional association between the auditory and glosso-kinæsthetic centres and that between visual and cheiro-kinæsthetic centres is extremely close. The word centres are in health excited to activity 1° by sensory impressions from without; 2° by association (i. e., by an impulse communicated from another centre during some act of perception or thought process); 3° by voluntary recall of past impressions. The author reviews the theories which have been proposed to account for the predominant influence of the left hemisphere upon speech without pronouncing for one or another, but insists upon the fact that the right hemisphere does not remain entirely uneducated, but receives to some extent visual and auditory speech impressions, and may possibly be able to some extent at least to take on a vicarious action, when the centres of the left side are injured. He strongly opposes the idea of a separate centre for concepts. Passing to the consideration of lesions producing speech defects, he confines himself to the study of those of the four word centres. The frequent association of aphasia with agraphia he ascribes to the proximity of the speech and writing centres, and of their afferent fibres to one another, combating the view that a lesion restricted to Broca's region will produce agraphia as well as aphasia. The question as to whether an isolated lesion of Broca's region will always produce verbal amnesia and alexia is answered negatively. While there is on record no case of pure agraphia, the author holds to his idea of a cheiro-kinæsthetic centre, suggesting that it occupies so limited an area that a lesion in that region is always large enough to produce paralysis of other movements of the hand and arm, at the same time as agraphia.

The division of aphasia into a motor and sensory form is not in accordance with his views. He prefers to limit the term aphasia to speech defects the result of lesions in Broca's region, using that of aphemia for those due to subcortical lesions, leaving those due to lesions of the visual and auditory centres to be grouped as amnesia, visual or auditory. He then proceeds to point out the most common combinations of symptoms of lesions in the various word centres, illustrating them by numerous case histories. A close study of these shows surprising and at first sight contradictory results. While insisting throughout upon the superior importance for speech, in most persons, of the auditory centre, the author thinks that some cases of speech preservation where the auditory centre was destroyed, may be explained by the theory that the affected individuals were "strong visuals." In other apparently anomalous cases, extending over years, the original injury may have been less extensive than that found after death. In those cases in which power of speaking has been gradually regained, he thinks that the right auditory centre may have been by degrees educated to act through the commissural fibres upon the glosso-kinæsthetic centre of the left side. He explains the cases of word blindness without agraphia, by assuming that, the subjects being strong "auditives," the cheiro-kinæsthetic centre was influenced directly from the auditory centre. The cases of destruction of the centres in both hemispheres are so few and their histories so incomplete that the author does not attempt to explain their symptoms at any length. For a discussion of the forty-three cases mentioned, see the original. In his other paper the author gives a very complete history extending over eighteen years of a remarkable case of speech defect, in which, though the autopsy showed complete destruction of the angular and marginal gyri, of the superior and part of the middle temporal convolutions, and of part of the ascending frontal, second frontal, and ascending parietal convolutions on the left side, Broca's region being uninvolved, there was neither word deafness, word blindness, nor agraphia. Spontaneous speech was however very limited, and though the patient could read and understand what he read, and could copy with his left hand, he could neither write spontaneously, nor from dictation, nor could he read aloud. ALLEN.

271. PARALYSIS OF THE SIXTH NERVE FOLLOWED BY DIPLEGIA: RECOVERY. Wood (Brit. Med. Jour., Apr. 3, 1897).

The author reports an interesting case, apparently of acute toxic or infectious origin, but thrombosis was not excluded.

A healthy lad of 18, of gouty heredity, gradually developed during two days, paralysis of the right sixth nerve and in the succeeding five days, left hemiplegia, including the lower part of the face. The orbicularis palpebrarum and the frontalis were not involved and sensation was normal except for a feeling of numbness on the paralyzed side. The hemiplegia rapidly improved and in two weeks had quite disappeared, but four days before this, distinct bulbar paralysis came on and in five days had become very marked, the tongue, lips, pharynx and probably larynx being affected. From this condition the patient also rapidly recovered and a month later was practically well excepting the abducens paralysis, a trace of which remained five months after the beginning of the trouble.

The author seems unwilling to make a diagnosis, but likens the case to an acute poliomyelitis of the medulla and pons—a comparison that seems to us to be eminently rational. PATRICK.

272. THYROID CHLOROSIS. Dr. Capitan (The Medical Week, 5, 1897, p. 609).

Dr. Capitan, noting the well known fact that in chlorotic subjects the thyroid gland is frequently enlarged, states that Professor Hayem has found this to be the case in twenty-nine patients out of thirty-five under his observation. The goitre is usually very small and very soft, though sometimes it is pulsating, in which latter case